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January 18, 2002

FILED ELECTRONICALLY

Ms. Magalie R. Salas, Secretary
Federal Communications Commission
The Portals
445 12th Street, S.W. TW-A325
Washington, D.C. 20554

Re: ET Docket No. 98-206
IB Docket No. 01-96
Ex Parte

Dear Ms. Salas:

On January 17, 2002, the undersigned counsel representing PanAmSat Corporation ("PanAmSat") and Ted Berman of PanAmSat met with Tom Derenge of the Office of Engineering and Technology and the following persons from the International Bureau to discuss the above-referenced proceedings: Tom Tycz, Jennifer Gilsenan, Bob

Nelson, and Mark Young. A summary of the points PanAmSat made appears in the enclosed handout from the meeting.

Sincerely,

/s/ Joseph A. Godles
Joseph A. Godles
Attorney for PanAmSat Corporation

Cc: Tom Tycz
Jennifer Gilsenan
Bob Nelson
Mark Young
Tom Derenge

Briefing To FCC International Bureau

NGSO/GSO & NGSO/NGSO Sharing Issues

17 January, 2002

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Ku-band NGSO First Report and Order (NGSO /GSO Sharing)

(Docket 98-206)

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PAS Issues

- Demonstration of Additional Operational Limits compliance should be required prior to licensing
- Pre-operational compliance procedures for Additional Operational Limits should be more stringent
- Aggregate Limits should be enforced now
- WRC-2000 earth station off-axis EIRP limits are unnecessary because of FCC Part 25

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Demonstration of Additional Operational Limits compliance should be required prior to licensing

- System construction will be virtually complete & customers lined up
- May be difficult for NGSO licensee to make significant changes at this point
- Would be difficult for Commission to enforce at this stage due to technical, commercial, and political reasons
- Compliance should be demonstrated before licensing
- Due to technical complexity, other parties should have the opportunity to review and comment on compliance software and data

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Pre-operational compliance procedures for Additional Operational Limits should be more stringent

- Pre-operational stage
  - NGSO antenna patterns should have 99% bound on sidelobe levels over satellite lifetime
  - GSO FSS operators should be able to submit test points
  - Maximum $EPFD_{down}$ maps should be required
    - For all GSOs, at 2 deg. intervals
    - For all locations on ground, at 1 deg. by 1 deg. intervals
  - AOLs must be met everywhere, not just at operational Earth Stations, as suggested by some commentators

Aggregate Limits should be enforced now

- Commission should reconsider decision not to enforce aggregate limits now
- Possible enforcement later creates interference risk for GSOs and regulatory uncertainly for both GSOs and NGSOs
- Aggregate limits are the most critical limits to GSOs. In fact, single-entry limits were derived from them
- A suitable procedure for evaluation has been developed. It is described in ITU WP-4A/280
  - Contains 3 methods
  - In methods 1 &2, interaction between NGSOs not taken into account
  - More detailed method 3 takes interaction into account, and only used if systems fail methods 1 & 2
- NGSOs have no technical basis to certify they will comply with these limits, since they won't know what other systems are doing

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WRC-2000 earth station off-axis EIRP limits are unnecessary because of FCC Part 25

- Commission correct that Part 25 limits are already more stringent
- Therefore, formal adoption of WRC-2000 limits in US is unnecessary
- Revising current limits would create regulatory confusion for both GSO and NGSO systems

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NPRM in the NGSO/NGSO Ku-Band Sharing Rulemaking

(Docket 01-96)

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PAS Issues

- Aggregate Limits should be enforced now
- Spectrum sharing options 1,2,4 eliminate problem of aggregate interference into GSO
- Option 3, preferred by potential NGSO licensees, has greatest potential for aggregate interference

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Aggregate Limits should be enforced now

- See arguments above
- Demonstration need not delay licensing. A possible scheme is as follows:
  - Band segment NGSOs as much as possible. If, however, more than 3 would be in same band, then:
  - Evaluate aggregate limit compliance as per ITU Recom. Methodologies 1 and 2
  - If they don't pass, either: a) band-segment more; or b) use meth. 3
  - Number of NGSOs can be limited if some fail to meet Commission milestones
  - Later applicants would have to coordinate with first-round applicants

Spectrum sharing options 1,2,4 eliminate problem of aggregate interference into GSO

- Aggregate limits are tightly linked with the spectrum sharing option
  - Options 1 (flexible band segmentation) and 2 (dynamic band segmentation) would make aggregate limit checking unnecessary if number of systems per band at most 3
  - Option 4 (homogeneous constellations) is especially suitable for sharing with GSO systems and would result in efficient use of available spectrum
- A hybrid option is possible: e.g.: part of spectrum for option 1,2, or 3 and part for option 4

Option 3, preferred by potential NGSO licensees, has greatest potential for aggregate interference

- Option 3 (avoidance of in-line interference events) is potentially problematic
  - NGSO/NGSO interference could be avoided due to in-line event avoidance
  - However, this would not prevent interference into GSOs
  - If adopted, it is imperative that aggregate limits be vigorously enforced

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